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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,100	02/24/2005	Jong-Hwan Kim	BIP-0009	2663

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EXAMINER

MATTER, KRISTEN CLARETTE

ART UNIT	PAPER NUMBER
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3771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/526,100

Applicant(s)

KIM, JONG-HWAN

Examiner

Kristen C. Matter

Art Unit

3771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 44-119 is/are pending in the application.
- 4a) Of the above claim(s) 6,9,46,49,62-99 and 108-119 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-5,7,8,10-12,44,45,47,48,50-61 and 100-106 is/are rejected.
- 7) ☐ Claim(s) 107 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/29/06, 10/31/05, and 2/24/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I, drawn to claims 1-5, 7, 8, 10-12, 44, 45, 47, 48, 50-61, and 100-107 in the reply filed on 3/8/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "431" has been used to designate both eccentric rotary shaft and shaft supporting bracket (on page 23). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: on page 11, line 9, "And a post" should be changed to -- A post--.

Appropriate correction is required.

Claim Objections

Claims 55 and 56 are objected to because of the following informalities: on line 2, "unit" should be changed to --units--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 4, 5, 7, 8, 10-12, 53, 55, 56, 57, 58, 59, 60, and 100-105 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, it is unclear what ends of the motion units "the respective ends" are referring to.

Claim 53 recites the limitation "the eccentric rotary shafts" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claims 55 and 56 recite the limitation "the link unit" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claims 57 and 60 recite the limitation "the driving unit connecting shaft" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claims 4, 5, 7, 8, 10-12, 58, 59, and 100-105 are dependent on claim 2 and are therefore rejected for the reasons outlined above with respect to claim 2.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 44, 45, 47, 53-58, 60, 61, 104, and 106 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohshita (US 5,443,439).

Regarding claims 1-3, Ohshita discloses an exercising apparatus comprising pairs of motion units (11) arranged in a longitudinal direction with a hinge unit (8) installed at one end thereof, an up-and-down reciprocating unit (16) connected with the other end of the respective moving unit, and a driving unit (2). The hinge units can be considered to face each other or to be arranged in the respective ends of the pair of motion units (see Figures 1-3).

Regarding claims 4 and 44, Ohshita discloses a driving unit connecting shaft (29) an eccentric rotary shaft (23) and at least one link unit (14) connected with the moving unit and eccentric shaft.

Regarding claim 5 and 45, the up-and down- reciprocating units are coupled with each other by a motion coupling unit (15 or 45).

Regarding claim 7 and 46, Ohshita discloses a motion coupling unit (45) comprising pulleys and a belt (Figure 11).

Regarding claims 53 and 54, Ohshita discloses the eccentric rotary shaft of the pair of motion units can have an angular difference of 0-180 degrees with each other (column 6, lines 50-60).

Regarding claims 55 and 56, Ohshita discloses 2 link units (14).

Regarding claims 57, 58, 60, and 61, the driving unit connecting shaft is connected to a driving shaft (23a) by a rotation transmitting unit comprising a driving pulley (43), a slave pulley (44), and a belt (45).

Regarding claims 104 and 106, Ohshita discloses a driving unit (82) having a pair of driving shafts (84) at the ends of the motor connected with driving unit connection shafts (83) by a rotating transmitting unit (coupler) (See Figure 22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 48, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita as applied to claims 1-5, 7, 44, 45, 47, 53-58, 60, 61, and 100-107 above and further in view of Schiessl (US 6,659,918). Ohshita does not disclose pulleys and belts with corresponding toothed structures. However, Schiessl discloses a device for stimulating muscles using a motor and toothed belt drives (28). It would have been an obvious design choice to one of ordinary skill in the art at the time of the invention to provide Ohshita's device with toothed belt drives as taught by Schiessl to drive the shafts in a push-pull manner or for manufacturing purposes.

Claims 10-12 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshita as applied to claims 1-5, 7, 44, 45, 47, 53-58, 60, 61, and 100-107 above and further in view of Son (US 2005/0033203). Ohshita does not disclose both ends of the eccentric rotary shaft connected to a pair of concentric shafts having the same center, wherein the concentric shafts are supported by a shaft supporting bracket, and the concentric shafts are further connected with an eccentric balance weight. However, Son discloses a drive system with both ends of an eccentric shaft (120) connected to a pair of concentric shafts (112, 128) having the same center, wherein the concentric shafts are supported by a bracket (130) and wherein the concentric shaft is connected to an eccentric weight (126). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the drive and pulley system (Figure 10) of Ohshita's device with two drive systems as taught by Son (Figure 3a) to avoid the use of a pulley system. Furthermore, it appears that the modified device would perform equally well as the original Ohshita device because the same up-and-down motion would be produced.

Allowable Subject Matter

Claims 100-103 and 105 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 107 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3771

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Riddle et al. (US 5,500,002) and Hueftle, Jr. (US 3,540,436) are cited to show other dynamic motion exercise plates.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristen C. Matter whose telephone number is (571) 272-5270.

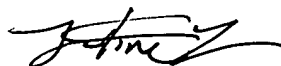
The examiner can normally be reached on Monday - Friday 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kristen C. Matter
Examiner
Art Unit 3771



JUSTINE R. YU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

3/27/07